Work Order ID 101778

Quality Control

101778

Page 1

May-13-13 1:14:02 PM D2232-3 11 22 2 3 2 - 3 Accept *N900040100* Setup Start Item ID: **Revision ID:** Stop Basket Hinge Item Name: **Start Qty: 12.00 Cust Item ID: Start Date:** 5/13/13 Req'd Qty: 12.00 Required Date: 5/24/13 **Customer:** Reference: Run Date: 13-05-14 Tooling: Date: Process Plan: MLJ Approvals: Stop QC: Date: SPC (Y/N): Date: Reject Reject Set Up/ Tool ID Tool # Plan Accept Insp. Sequence ID/ Operation Number Code Qty Qty Stamp **Work Center ID** Description **Run Hours Draw Nbr Revision Nbr** D2232 Rev C 12 0.00 100 JMB-09-16 FLOW WATER JET *100* 0.00 Waterjet Memo FLOW CNC Waterjet 1-Cut as per Dwg D2232 Dwg Rev: Prog Rev: Deburr if necessary 0.00 110 QC2- Inspect parts off machine FAI/FAIB JMB-09-4 *110* 0.00 QC Memo Quality Control DAS 27 QC8- Inspect parts - second check 0.00 120 9:89 QC Memo

| | | | | | | | | | | | DQA: | Dat | te: |
|--------------|------|------------|------------|---------------------------------------|--------|--------------------------------|-------|------------------------|------------------------|------------------------|--------------------------|----------------------------|--------------------|
| NCR: Y | es/ | / No | | | | WORK ORDER NON- | COI | VFOR | MANCE / UP | DATE | OA Charada | | |
| | | - | | | | T | | | · . | | QA Closed: | Dat | (e: |
| Work Orde | er: | | | | | DISPOSITION | | | | AGAINST DE | PARTMENT | /PROCESS | |
| Part N | - | | | · · · · · · · · · · · · · · · · · · · | | Rework Scrap | | | Skid-tube Machining | Crosstube Small Fab | 4 | Water Jet d. Eng. Coor. | Quality |
| NCR No. | | | | | | Use-as-is Work Order Update | Thern | noforming Large Fab | Finishing Composite | Rec/Stoi | re/Packaging Supplier | Other | |
| Root | | | | | Descri | iption of work order update | Ti | nitial | Act | tion | Sign & | | |
| Cause | - 1 | Date | Step | Qty | | or Non-conformance | Ch | ief Eng | Desci | ription | Date | Verification | n QC Inspector |
| Ooc/Data | | | | | | | | | | | | | |
| quip/Tooling | | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | | |
| /laterial | | | | | | | 1 | | | | | | |
| etup | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| rocess | | | | | | | | | | | | | |
| Supplier | | ľ | | | | | | | | | | | |
| raining | | | | | | | | | | | | | |
| Inapproved | | | | | | | | | | | | | |
| | | | | | | | FAUL | T CATE | GORY | | | | |
| Landi | ng G | iear | | | | General | | - | | · | - | | |
| | | Bending | | | | Bend | L | Grain | | | Ovalized | | Pressure/Forced |
| | | Centre No | t Concer | ntric to | o/s | BOM/Route | L | Hardwa | re | | Over/Under | tolerance | Temperature/Cure |
| | | Cracks | | | | Broken/Damaged | | Inspect | ion Incomplete | | Part Incorred | ct | Weld |
| | | Crushed/0 | Crimped | | | Burrs | | Instruct | ions Incomplete/l | Unclear | Part Lost/Mi | ssing | Wrong Stock Pulled |
| | | Cuffs | | | | Contamination | | Mainte | enance | | Part Moved | | |
| Heat Treat | | | | Countersink | | Mislabe | eled | | Positioned V | Vrong | | | |
| | | Inspection | n Strip in | Tube | | Cut Too Short | | Misread | d | | Power Loss/ | Surge | Other |
| | | Ripples in | Bend | | | Drill Holes | | Offset | | | | | |
| | | Torque W | aves in E | xtrusio | , [| Drawing | | Out of | Calibration | | | | |

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Finish

Folio

| Work Ordo <i>May-13-13 1:14</i> | | 1778 | | | *101 | 778* | | | | | | i de Marcia de Joseph Constitución de la constituci | Page 2 |
|---|----------------------|---|-------------------------------|--------------|------------------------------|--------------------------|------|--------------|---------------|------------|---------------|--|----------------|
| Item ID: Revision ID: Item Name: | D2232-3 Basket Hinge | | | , A | Accept | *N900 | 040° | 100 |)* | Setup | Start Stop | *N.9 | S1* |
| Start Date: Required Date: Reference: | 5/13/13 | Start Qty: 12.00 Req'd Qty: 12.00 | | *12* *12* | | Cust Item I Customer: | D: | | | | . · | | |
| Approvals: | Process Pla | n: | Date: | | Tooling: _ SPC (Y/N): | | nte: | | | Run | Start | *NI *NI | R1* R2* |
| Sequence ID/ Work Center II 130 *120* Small Fab Small Fab | D | Operation Description Small Fab Memo Deburr | | | Set Up/ Run Hours 0.00 | Tool ID | | Plan Code | Accept Qty | Rej Qty | | Reject Number | Insp. Stamp |
| *140 *140* Packaging Packaging | | Identify as per dwg & Sto Memo *****STOC | ock Location:_ K IN BASKET | | 0.00 | | | | 12× | 28 28 | 13 | -09-1 | F |
| 150 | | OC21- Final Inspection - | Work Order R | Release | 0.00 | - | | | | | | | , |

0.00

Memo

Quality Control

MUS 13-09-17

| | | | | | | | | | | | DQA: | Date: | |
|---------------|----------|-----------|-----------|----------|----------|--------------------------------|----------|---------|------------------------|---------------------|--------------|--------------------------|--------------------|
| NCR: | ⁄es | / No | | | | WORK ORDER NON- | COI | VFORM | MANCE / UPI | DATE | | | |
| | | | | | | | | | · · · · · | | QA Closed: | Date: | |
| | | | | | | DISPOSITION | | | | AGAINST DE | PARTMENT | /PROCESS | |
| Work Orde | er: . | | | | | <u> </u> | ٦ | | | | 7 | | 1 |
| | | | | | | Rework | 4 | | Skid-tube | Crosstube | - | Water Jet | Engineering |
| Part N | NO | | | | | Scrap | - | | Machining | Small Fab | -4 | od. Eng. Coor. | Quality Other |
| NCR N | ı. | | | | | Use-as-is Work Order Update | - | | noforming Large Fab | Finishing Composite | Kec/Sto | re/Packaging Supplier | |
| NCK | NO | | | | | work Order Opdate | ا ل | | raige rab | composite[_ | | 3upplier | |
| Root | | | | | Descri | ption of work order update | | Initial | Act | ion | Sign & | | |
| Cause | | Date | Step | Qty | ď | or Non-conformance | Ch | ief Eng | Descr | ription | Date | Verification | QC Inspector |
| Doc/Data | | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | | |
| Material | | | | | | | | | | | | | |
| Setup | Ш | | | | | | | | | • | | | |
| Other | | | 1 | | | | | | | | | | |
| Process | Ш | | | | | | | | | | | | |
| Supplier | Ш | | | | | | | | | | | | |
| Training | | | | | | | | | | | | | |
| Unapproved | | | | | | | <u> </u> | | | | <u> </u> | | |
| | | | | 5, | | | AUL | T CATE | GORY | | | | · · |
| Landi | _ | ł | | , A | : | General | _ | 7 | | _ | 7 | _ | ı . |
| | \vdash | Bending | | | <u> </u> | Bend | <u>_</u> | Grain | | <u> </u> | Ovalized | _ | Pressure/Forced |
| | - | Centre No | ot Concei | ntric to | o/s _ | BOM/Route | <u></u> | Hardwa | | L | Over/Under | - | Temperature/Cure |
| | | Cracks | | | | Broken/Damaged | \vdash | 4 | on Incomplete | <u> </u> | Part Incorre | - | Weld |
| | - | Crushed/ | Crimped | | <u> </u> | Burrs | Ŀ | 1 | ions Incomplete/l | Jnclear | Part Lost/M | _ | Wrong Stock Pulled |
| | | Cuffs | | | | Contamination | | Mainte | enance | | Part Moved | | |

Mislabeled

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Positioned Wrong

Power Loss/Surge

Other

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

May-13-13 1:14:01 PM

Work Order ID:

101778

Parent Item:

D2232-3

Parent Item Name:

Basket Hinge

Start Date: 5/13/13

Required Date: 5/24/13

Start Qty: 12.00

Required Qty: 12.00

Comments:

IPP B01.06.07Now laser cutEC

IPP Rev:C Now on Waterjet 06-10-26 JLM

| Component Item ID/ Item Name | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|----------------------------------|-------------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|------------------------|---------------|----------------|-----------|
| M304S11GA 304/316 0.125 Sheet | Purchased | No | | | 100 | sf | 183.3300 | 0.0694 | 0 .87663 12 | 2 | J | M13-09-16 |
| | | | Location | | Loc Qty | L | oc Code | | | | | |

 Location
 Loc Qty
 Loc Code

 MAT020
 183.33

 122521
 24.93

 124445
 158.4

| | | | | | | • | | | | | DQA: | Dat | te: | | |
|---|---|------|--|---|---|-------------------|---|----------------------------|----------------|--|----------------------|--------------|--|--|--|
| NCR: Y | 'es | / No | | | | WORK ORDER NON-C | 10: | NFORM | MANCE / UPC | DATE | QA Closed: | Dat | te: | | |
| Vork Orde | er: | | | | , | DISPOSITION | | AGAINST DEPARTMENT/PROCESS | | | | | | | |
| Part No | | | | | Rework Scrap Use-as-is Work Order Update | | Skid-tube Crosstube Machining Small Fab Thermoforming Finishing Large Fab Composite | | | Prod. Eng. Coor. Rec/Store/Packaging | | | Engineering Quality Other | | |
| Root Date Step Qty | | | | otion of work order update or Non-conformance | ı | nitial ief Eng | Acti | ion iption | Sign & Date | Verification | n | QC Inspector | | | |
| oc/Data uip/Tooling perator laterial etup ther rocess upplier raining | | | | | | | | | | | | | | | |
| | | | | 1 | • | F/ | AUL | T CATE | GORY | | | | | | |
| Landii | ng G | ear | | | | General | | | | | | | | | |
| | Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion | | | | Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing | | Grain Hardware Inspection Incomplete Instructions Incomplete/Unclear Maintenance Mislabeled Misread Offset Out of Calibration | | | Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/ | ct ssing Vrong | | Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other | | |
| | Turning Sequence | | | | Finish | | Out of Sequence | | | | | | | | |

Outside Dimensions

Wave/Twist in Tube

Folio

| DART AEROSPACE LTD | Work Order: | 101778 |
|------------------------------|--------------|-------------|
| Description: Basket Hinge | Part Number: | D2232-3 |
| Inspection Dwg: D2232 Rev: C | | Page 1 of 1 |

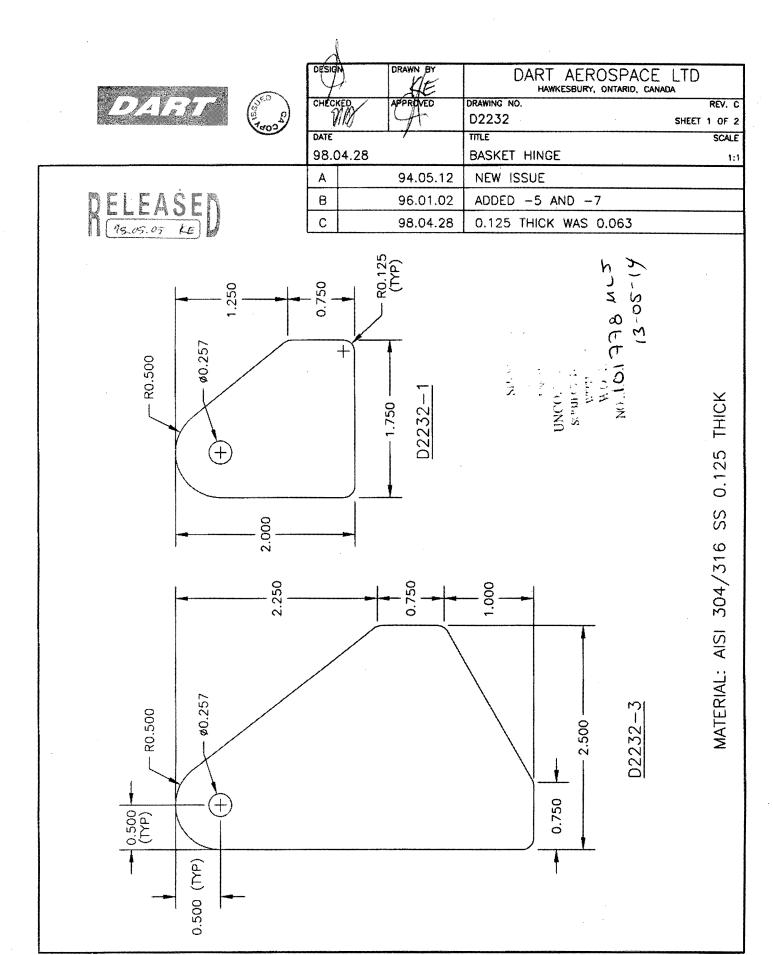
FIRST ARTICLE INSPECTION CHECKLIST

| X | First Article | | Prototype |
|---|---------------|--|-----------|
|---|---------------|--|-----------|

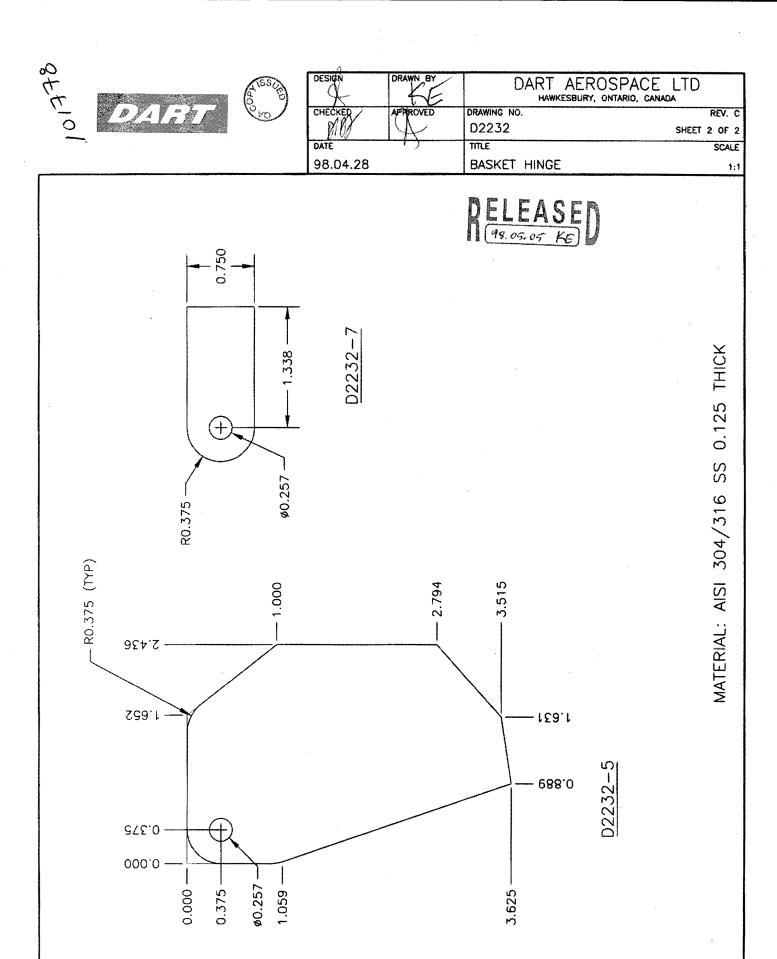
| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|----------------------|---------------|------------------|--------|--------|-------------------------|----------|
| 0.500 | +/-0.010 | 0 304" | | | υ | Jemo: |
| 0.750 | +/-0.010 | 0.750" | _ | | V | |
| 2.500 | +/-0.010 | 7.506 | | | γ | , |
| 1.000 | +/-0.010 | 1-000 | - | | ν | 1,000 |
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| Measured by: Jm | Audited by: | 9-89 | Prototype Approval: | N/A |
| Date: 13-09-16 | Date: | 13 9 16 | Date: | N/A |

| Rev | Date | Change | · · · · · · · · · · · · · · · · · · · | Revised by | Approved |
|-----|----------|-----------|---------------------------------------|---------------------------------------|----------|
| Α | 06.11.08 | New Issue | | Revised by KJ/JLM | B. |
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